

been bred and kept in captivity. Besides ourselves, 'Becky' had several friends, and lived on amicable terms with a hedgehog (Algernon) and two tame monkeys 'Young Jacob' and 'Lizzie' who were just lately wedded. Except for an occasional tiff with 'Young Jacob' when he got more than what she considered fair of his share of oranges, there was perfect concord.

One day she had a very narrow escape, being nearly run over by a car when in an ecstasy performing her Puja. Becky's many friends and admirers will be grieved to hear that she is shortly leaving India to take up her abode in the Zoological Gardens, London.

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BOMBAY, 18th August 1922.

(In the case of kites and vultures, the habit of spreading their wings in the sun is commonly observed but I do not think it has been observed with the hornbill.)

#### No. X.—ON THE BREEDING OF CERTAIN WAGTAILS.

It may be of interest to record the following notes on the breeding of certain Wagtails which came to my notice during the year 1921 :—

##### 1. The Grey Wagtail, *Motacilla cinerea melanope*, Pall.

In the Fauna of India it is stated that the Grey Wagtail breeds in Kashmir above 6,000 ft. and in Afghanistan. This statement appears to be based on the records by Brooks and Wardlaw-Ramsay which are quoted in the second edition of Hume's "Nests and Eggs," Vol. II, p. 207. As regards Kashmir, Ward has confirmed that it breeds commonly. Since then Whitehead (Ibis, 1909, p. 240) has recorded that it nests freely along the streams of the Sufedkoh from 6,000 to 8,000 ft., and Meinertzhagen has shown (Ibis, 1920, p. 147) that it is a widely distributed but very local summer visitor to the mountain streams about Quetta, breeding between 7,000 and 9,500 ft.

Many years ago I ascertained, in the course of a shooting trip, that the Grey Wagtail breeds in Kulu, and in 1921 I was able to verify my observations. It is a common breeding species all along the valley of the Beas from Sultanpur (4,000 ft.) upto at least 9,000 ft. at Rahla, at the foot of the Rhotang Pass. It certainly occurs in some, and probably in all, of the side nullahs which run down into the Beas, as, for instance, the Solang nullah, and the Kraun nullah which runs to the Northern base of the Bhubu Pass. A few pairs, moreover, breed south of the outer-Himalayan range, for on the 17th May I watched a female on to her nest situated at 7,000 ft. elevation at the Southern base of the Bhubu Pass in Mandi State. This nest was a mass of dry grass, bents, and the usual miscellaneous materials of a similar character, with a deep well rounded cup of dry shreds of grass thickly lined with white goat-hair. It was placed on the ground under a bracken plant close upto the perpendicular side of a huge rock, one of a mass of rocks jumbled into the small nullah from which commences the ascent of the pass. There were 4 fresh eggs measuring  $19.5 \times 14.5$ ,  $19 \times 14.5$ ,  $19 \times 14.5$  and  $18.5 \times 14.5$  mm. They agree exactly with Hume's description. Fledged young were seen on the Beas on 17th June. A couple of birds were seen at 5,000 ft. at the end of June at Banjar so it probably also breeds throughout Inner and Outer Saraj.

On crossing the Rhotang Pass I again found the Grey Wagtail in Lahul. There it breeds along the course of the Chandra and Bhaga Rivers at an average height of 10,000 ft.

The nests are exceedingly difficult to find in Lahul as they are built amongst the stones lying in vast confusion all along the banks of the rivers which rush noisily down their stony beds and for the most part are not fordable. Much watching only produced two nests, both at Koksar 10,000 ft. on the 14th June. Both nests were under stones on the side of slight declivities. One contained 5 eggs just hatching; in the other were 4 half grown nestlings with an egg containing a dead chick. In construction the nests appeared similar to that above described.

2. The Masked Wagtail, *Motacilla alba personata*, Gld.

3. Hodgson's Pied Wagtail, *Motacilla alba hodgsoni*, Blyth.

Hartert gives the breeding range of these two Wagtails as follows, remarking that the boundaries are not clearly known.

*M. a. personata*, Turkestan from Transcaspia to the Altai and the southern end of the Baikal sea, the northern end of the Chotan Tagh, the Oases of Nija. Keria and Ssampa, southwards to northern Kashmir, Afghanistan and North Persia.

*M. a. hodgsoni*, Southern Tibet and the northern slopes of the Himalayas eastwards from Kashmir.

This unfortunately is not very clear, and authenticated details from the various Himalayan areas are badly wanted. There seems to be very little on record. In the Jhelum Valley about Srinagar, that is to say the so-called vale of Kashmir, *hodgsoni* is an abundant breeding species; this was reported by Cock and Brooks years ago, and has been confirmed by more modern travellers including the writer; it is also the common breeding bird of the Indus Valley about Leh in Ladakh, as was shown by the American, Abbott and confirmed very recently by Ludlow. This year I was able to ascertain that it breeds very commonly along the valleys of the Chandra and Bhaga rivers in Lahul at an average height of 10,000 ft. above sea level. Further east, Brooks reported it as breeding in the Bhagirattee Valley north of Mussoorie.

In Gilgit and Chitral we have apparently the meeting ground of the two races, which is interesting in view of the fact that Gilgit at least is the meeting ground and interbreeding area of *Oenanthe picata* and *E. capistrata*. Though in the case of the Wagtails there is the curious feature that the status of the two races is apparently different. Here *M. a. personata* is a resident and common species, while *M. a. hodgsoni* is less abundant and a summer visitor. Owing to the difficulty of distinguishing the two races in winter plumage and, to a less extent, the difficulty in summer of distinguishing first summer females of *hodgsoni* from either sex of *personata*, records must be accepted with some reserve. But a perusal of the records by Scully, Biddulph and Perreau for these areas shows that considerable attention was directed to the question of these Wagtails and the deductions appear to be correct.

Further east records are still more wanting, but in the Kurram River, from Thall (2,550 ft.) upwards, *personata* is a common breeding bird (Whitehead Ibis, 1909, 240). In Afghanistan we already know that it is abundant and breeds (Wardlaw-Ramsey). While Meinartzhagen (Ibis, 1920, 148) hints that a few breed about Quetta.

It is curious, in view of the above distribution, to note that this year I found the nest of *personata* on the Beas in Kulu at about 4,500 ft. between Sultanpur and Raisan. As I was going along the road which borders the river in this part, I saw a Wagtail collecting insects on a small stony island of the river, separated by a deep but narrow channel from the road side. It was very close to me, a matter of some 25 yards or so and turning a pair of powerful glasses on to it I had no difficulty in identifying a male *personata*, with no trace of black feathers on the back. It was a question of a few minutes only to watch the Wagtail to its nest, which was situated in a hole under a stone on the island. There was then I found a second Wagtail collecting flies on the island, but this was a

female *maderaspatensis* (which is the ordinary breeding bird of the Beas Valley) and as she was apparently taking her food to the same nest I rather naturally supposed that the two birds were paired; I was however surprised at some hostility towards her on the part of the cock. Luckily thinking the instance a curious one I continued to sit and watch through my glasses, in order to put the identifications beyond doubt. This gave time for two more Wagtails to arrive, namely, the female *personata* (who was readily distinguishable from her mate by her somewhat duller plumage, though she too had no black feathers on the back) and the male *maderaspatensis*. Both *personata* then continued to collect and carry food to the nest though the male was hampered by his determination to prevent the female *maderaspatensis* taking her mouthful of flies to his chicks. Being at last thoroughly satisfied with my identifications—through strong glasses in bright sunlight at 25 yards—and not wishing to kill the parents of a nest with young, I sent an orderly to strip and reach the island through some shallow water further up, while I continued to watch the birds. The orderly duly reached the nest and reported 5 young birds and 2 addled eggs. He then brought back to me the two eggs and one of the nestlings which had the feathers just coming through the quill. My intention was to try and rear this bird and it took food readily but was unfortunately killed by a cat or mongoose next morning.

The two eggs are now in my collection; they measure  $19 \times 15$  and  $18.5 \times 15$  mm. They are broad and blunt, almost oval in shape with a faint gloss. The colour is greyish-white, spotted, speckled, and stippled moderately all over with pale yellowish-brown and ashy-grey.

These were the only birds of the species seen in the Kulu Valley and I am of opinion that their nesting was merely an isolated case.

#### 4. Hodgson's Yellow-headed Wagtail. *Motacilla citreola calcarata*, Hodgs.

Dr. Claud Ticehurst has recently shewn (Bull. B.O.C., Vol. xi., 81) that the correct name of this Wagtail is *M. c. calcarata*, Hodgs., which had been discarded in the Fauna in favour of *M. citreoloides*.

We have in *M. c. calcarata* and *M. c. citreola* a very parallel case to that of the two Pied Wagtails just considered; the grey-backed form is the northern breeding form, while the black-backed occupies in the breeding season a mere southerly Himalayan area. There is again some doubt as to the exact boundaries of the respective areas.

Again in Gilgit both species apparently are found breeding on the same ground. There is some indication that in Chitral also possibly both birds breed, but most observers find some difficulty in distinguishing all but adult plumages of the Wagtail group, and in many cases it is probable that the two immature phases in which *calcarata* is now known to breed have been mistaken for *citreola*.

At any rate it is clear that *calcarata* breeds commonly throughout the vale of Kashmir (Nests and Eggs, Vol. II., 208, 2nd Ed.), in Central Ladakh and Suru (Jour. B. N. H. S., xxvii., 144) and the Kagan Valley (Ibis 1909, 242). A few also breed towards Quetta (Ibis, 1920, 147).

To these known localities I now have to add Lahul, where it breeds commonly, but locally, along the Chandra and Bhaga valleys at a height of about 11,000 ft. from Koksar to the Zaskar Nata. I was unfortunately too early to obtain eggs but, as I was marching back, on the 12th June I found a half built nest at Sissoo.

It is interesting to note that these Wagtails usually nest in the neighbourhood of a species of Bog King-Cup whose brilliant yellow flowers are exactly matched by the yellow heads of the birds.

Attention has been drawn by more than one observer to the fact that a large percentage of individuals of this species breed in immature dress; this applies to both sexes but unfortunately sufficient skins have not yet been collected fully to illustrate this interesting fact. The point may be specially drawn to



the attention of any naturalist who has the good fortune to spend much time on the breeding grounds of this species.

5. The Large Pied Wagtail, *Motacilla maderaspatensis*, Gm.

Long ago, Hume dubbed this Wagtail as "irregularly-minded" owing to the diversity of sites it affected for its nest. The following extract from my note book exemplifies this:—

16th April 1921, Kotla 1,500 ft., Kangra Valley.

"When out in the evening in one of the Nallahs below Kotla Fort I saw a male Wagtail sitting in meditative fashion on a niche of the wall of rock rising out of the stream: as he stayed there immobile I concluded that the nest was probably in the neighbourhood, and threw a large stone into the water in the hope that the resulting splash and noise might startle the female off the nest and reveal its whereabouts if anywhere near. The ruse was successful. The splash was followed by the appearance of a second Wagtail which emerged from the wall of rock from a large excrescence which looked like a heavy growth of some rock plant. I could see that there was a hollow in this. I accordingly took off my sandals and waded across the stream, which luckily did not rise much above my knees, and, standing below the rock, could see that the excrescence was in reality an old nest of the Dipper (*Cinclus pallasi tenuirostris*). It was out of my reach and the rock gave no foothold. Luckily at this juncture a balk of timber came floating down the stream and with its aid I was just able to reach the nest and ascertain the presence of eggs. Lifting the nest off its ledge—it came away solid—I waded back to the shingle and secured the hen Wagtail for identification. On examination it proved that the Wagtail had adapted the Dipper's nest to its own needs by lining the cup with hair and wool of various sorts. The Dipper's nest may best be described by likening it in shape and size to one of the Kashmiri Charcoal baskets ("Kangri") that is to say a deep cup with a dome over half the top. This was composed of dry tufts of grass welded together with moss into a very heavy compact and strong structure the size of a football. To continue the analogy of the Kashmiri basket, which has the bottom lined with an earthenware cup, the nest contained a strong and very compact cup lining of coarse grass, which I was able to lift out of the main structure as if it were a separate nest. In this was the Wagtail's nest. The 4 eggs were rather incubated."

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INDIAN POLICE.

No. XI.—ON THE HABITS OF THE WHITE-HEADED DUCK  
(*OXYURA LEUCOCEPHALA*.)

Shooting on the 4th December at Bahawalnagar, in the north of this State, a little before the light had gone, I noticed a small flock of about six birds whose appearance on the water rather puzzled me. They were in a deepish canal cut, only about thirty yards wide, and were in the company of a grebe of middle size, whose species I did not discover. This, and the fact they were swimming along ahead of me within shot hardly faster than I was walking, showing very little of their heads and bodies above the water, made me think at first that they were Dabchicks (*Podiceps albipennis*). A closer look made me suspect that they were something in the Duck line, so I got behind some cover and, after moving at an increased pace, came out suddenly level with them. I then saw the heavy, white-patched face and the rounded back, and, guessing they might be White-headed Duck (which by the way are not by any means rarities in this State), fired and succeeded in securing two.